

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A connecting structure for auxiliary machinery and a flat cable in which conductors arrayed in a flat configuration are integrally surrounded by an insulating covering; and an auxiliary machinery attached directly to the cable, said connecting structure ~~auxiliary machinery~~ comprising:

a housing comprising a board on which electronic components are mounted and to which a specific circuitry pattern has been formed;

a discrete connection terminal configured to receive said flat cable and- connects ~~connected~~ to said circuitry pattern on said board and to at least one conductor among said conductors of said flat cable, extending in a first direction therebetween, and comprising opposite ends in the first direction which terminate within the auxiliary machinery and are covered by the auxiliary machinery in the first direction;

an exposed connecting portion configured to expose a connection between said discrete connection terminal and at least one conductor of said flat cable on an outer surface of said housing; and

a molded part for sealing said exposed connecting portion ~~a connection between said connection terminal of said housing and said at least one conductor of said cable, said molded part located near the connection in the first direction,~~

wherein ~~a surface of~~ a first portion of said flat cable which extends from the connection is provided on and extends along an outer-side surface of said auxiliary machinery.

2. (currently amended): A connecting structure for auxiliary machinery and a flat cable according to claim 1, wherein:

said auxiliary machinery is coupled to an end of said flat cable at a first end portion of said housing of said auxiliary machinery;

said at least one conductor is connected to a proximal end portion of said connection terminal along the first direction, which is perpendicular to axes of the conductors; and

said flat cable is installed to extend along the outer-side surface of said housing over a specific distance from said first end to a second portion of said housing, and

at the second portion of said housing, the axes of the conductors bend in a direction away from the outer-side surface of said housing.

3. (currently amended): A waterproofing structure for an auxiliary machinery that is directly connected to a flat cable in which conductors arrayed in a flat configuration are integrally surrounded by an insulating covering, and ~~a surface of said flat cable is provided on and~~ extends along an outer-side surface of said auxiliary machinery, said waterproofing structure ~~auxiliary machinery~~ comprising:

a housing comprising a board on which electronic components are mounted and to which a specific circuitry pattern has been formed;

a discrete connection terminal configured to receive said flat cable and connects
~~connected to~~ said circuitry pattern on said board and to at least one conductor among said
conductors of said flat cable, extending in a first direction therebetween, and comprising
opposite ends in the first direction which terminate within the auxiliary machinery and are
covered by the auxiliary machinery in the first direction;

an exposed connecting portion configured to expose a connection between said discrete
connection terminal and at least one conductor of said flat cable on an outer surface of said
housing; and

a molded part for sealing said exposed connecting portion ~~a connection between said~~
~~connection terminal of said housing and said at least one conductor of said cable, said molded~~
~~part located near the connection in the first direction.~~

4. (currently amended): A mounting structure for auxiliary machinery that is directly
coupled to a flat cable in which conductors arrayed in a flat configuration are integrally
surrounded by an insulating covering, and ~~a surface of said flat cable is provided on and extends~~
along an outer ~~side~~ surface of said auxiliary machinery; and where a receiving member is
provided with a mounting hole for mounting the auxiliary machinery, said mounting structure
~~auxiliary machinery comprising:~~

a housing comprising a connection end engaged in the mounting hole and a board on
which electronic components are mounted and to which a specific circuitry pattern has been
formed;

a discrete connection terminal configured to receive said flat cable and connects
~~connected~~ to said circuitry pattern on said board and to at least one conductor among said
conductors of said flat cable, extending in a first direction therebetween, and comprising
opposite ends in the first direction which terminate within the auxiliary machinery and are
covered by the auxiliary machinery in the first direction;

an exposed connecting portion configured to expose a connection between said discrete
connection terminal and at least one conductor of said flat cable on an outer surface of said
housing;

a retainer attachable to the connection end of said housing and to the mounting hole of
said receiving member; and

a molded part for sealing said exposed connecting portion ~~a connection between said~~
~~connection terminal of said housing and said at least one conductor of said cable, said molded~~
~~part located near the connection in the first direction;~~ and wherein

said auxiliary machinery is mounted to said receiving member by attaching said retainer
in said mounting hole from one side of said receiving member, and attaching said housing to said
retainer from the other side of said receiving member.

5. (previously presented): A mounting structure for auxiliary machinery according to
claim 4, wherein said retainer comprises:

a collar for interlocking with a periphery of said mounting hole from a side opposed to a
side where the housing is attached;

a projecting part for interlocking with a periphery of said mounting hole from the side where said housing is attached; and

an interlocking projection that interlocks with said housing.

6. (previously presented): A mounting structure for auxiliary machinery according to claim 4, wherein said retainer comprises:

a collar for interlocking with a periphery of said mounting hole from a side opposed to a side where said housing is attached; and

an interlocking projection that interlocks with said housing,

wherein said auxiliary machinery is mounted and firmly fixed to said receiving member in a state such that peripheries of either open side of said mounting hole are held between said collar and a distal end of said housing after it has been mounted in said retainer.

7. (previously presented): A connecting structure according to claim 1, wherein said molded part is secondarily molded over said connection between said connection terminal and said at least one conductor after said connection is completed.

8. (previously presented): A waterproofing structure according to claim 3, wherein said molded part is secondarily molded over said connection between said connection terminal and said at least one conductor after said connection is completed.

9. (previously presented): A mounting structure according to claim 5, wherein said molded part is secondarily molded over said connection between said connection terminal and said at least one conductor after said connection is completed.

10. (previously presented): A connecting structure according to claim 1, wherein the molded part comprises two molded parts, each one arranged to cover one of the opposite end portions of said connection terminal in the first direction.

11. (previously presented): A waterproofing structure according to claim 3, wherein the molded part comprises two molded parts, each one arranged to cover one of the opposite end portions of said connection terminal in the first direction.

12. (previously presented): A mounting structure according to claim 5, wherein the molded part comprises two molded parts, each one arranged to cover one of the opposite end portions of said connection terminal in the first direction.

13. (currently amended): A connecting structure according to claim 1, wherein said housing comprises:

a large first portion that contains said board; and

a smaller second portion extending orthogonally from the large first portion, and

wherein said flat cable is attached to the housing at a distal end of said smaller second portion.

14. (currently amended): A waterproofing structure according to claim 3, wherein said housing comprises:

a large first portion that contains said board; and

a smaller second portion extending orthogonally from the large first portion, and

wherein said flat cable is attached to the housing at a distal end of said smaller second portion.

15. (currently amended): A mounting structure for auxiliary machinery according to claim 5, wherein said housing comprises:

a large first portion that contains said board; and

a smaller second portion extending orthogonally from the large first portion, and

wherein said flat cable is attached to the housing at a distal end of said smaller second portion.

16. (previously presented): A connecting structure according to claim 1, wherein the molded part also seals the connection between the terminal of said housing and said circuitry pattern of said board.

17. (previously presented): A waterproofing structure according to claim 3, wherein the molded part also seals the connection between the terminal of said housing and said circuitry pattern of said board.

18. (previously presented): A mounting structure according to claim 5, wherein the molded part also seals the connection between the terminal of said housing and said circuitry pattern of said board.

19. (previously presented): A connecting structure according to claim 1, wherein the molded part covers both of the opposite end portions of said connection terminal in the first direction.

20. (previously presented): A waterproofing structure according to claim 3, wherein the molded part covers both of the opposite end portions of said connection terminal in the first direction.

21. (previously presented): A mounting structure according to claim 5, wherein the molded part covers both of the opposite end portions of said connection terminal in the first direction.